	Application No.	Applicant(s)	
Notice of Allowability	10/613,779	MATHIAS ET AL.	
	Examiner	Art Unit	
	CAROLINE ARCOS	2195	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to *03/30/2009*.

2. ☒ The allowed claim(s) is/are *1-2, 12-18, 20, 22 and 23 are now renumbered as claims 1-12*.

3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a) ☐ All   b) ☐ Some*   c) ☐ None   of the:

        1. ☐ Certified copies of the priority documents have been received.

        2. ☐ Certified copies of the priority documents have been received in Application No. _____ .

        3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the

            International Bureau (PCT Rule 17.2(a)).

    * Certified copies not received: _____ .

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.

5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.

    (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached

        1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____ .

    (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of

        Paper No./Mail Date _____ .

    Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)

2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)

3. ☐ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date _____

4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material

5. ☐ Notice of Informal Patent Application

6. ☒ Interview Summary (PTO-413), Paper No./Mail Date _____ .

7. ☒ Examiner's Amendment/Comment

8. ☐ Examiner's Statement of Reasons for Allowance

9. ☐ Other _____ .

/Meng-Ai An/
Supervisory Patent Examiner, Art Unit 2195

EXAMINER'S AMENDMENT

1.   An examiner's amendment to the record appears below. Should the changes

and/or additions be unacceptable to applicant, an amendment may be filed as provided by

37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no

later than the payment of the issue fee.

2.   Authorization for this examiner's amendment was given in a telephone interview

with Brandon Williams on 06/29/2009.

3.   <u>This listing of claims will replace all prior versions and listings of claims in the</u>

<u>application:</u>

1.   A method for determining an amount of usage of applications in a logical partition

in a computer system and a bill for such usage, said method comprising:

        executing a guest operating system in said logical partition;

        said guest operating system dispatching a plurality of applications in said logical

partition;

        said guest operating system or other program executing in said logical partition

determining information indicative of an amount of usage of each of said applications;

        <u>determining a total usage of all of said applications in said logical partition based on</u>

<u>said information indicative of said amount of usage of each of said applications determined</u>

<u>by said guest operating system or said other program;</u>

determining, by a hardware usage monitor, logical partition usage information for

hardware resources used by the logical partition;

based on said information, reporting said amount of usage of each of said

applications to a billing function; and

comparing said total usage of all of said applications to an amount of usage of

hardware resources by said logical partition to audit said amount of usage of said

applications in said logical partition or a charge based on said amount of usage of said

applications;

said billing function determining a bill for each of said applications based on said

amount of usage of each of said applications and said logical partition usage of hardware

resources.

2.   A method as set forth in claim 1 further comprising:

determining said amount of usage of each of said applications based on said

information determined by said guest operating system or said other program executing in

said logical partition; and

reporting said amount of usage of each of said applications.

3-11.   (Cancelled)

12.   A method for determining an amount of usage of applications in a logical partition

in a computer system and a bill for such usage, said computer system including storage

private to said logical partition, storage private to said system and system functions, and

storage shared by said logical partition and said system functions, said method comprising:

executing a guest operating system in said logical partition;

said guest operating system dispatching a plurality of applications in said logical

partition, determining information indicative of [[said]] an amount of usage of each of said

applications, and writing said information indicative of said amount of usage to said shared

storage;

determining a total usage of all of said applications in said logical partition based on

said information indicative of an amount of usage from said shared storage;

determining, by a hardware usage monitor, logical partition usage information for

hardware resources used by the logical partition;

one of said system functions reading said information indicative of said amount of

usage of each of said applications from said shared storage and reporting information

indicative of said amount of usage of each of said applications to a billing function; [[and]]

comparing said total usage of all of said applications to an amount of usage of

hardware resources by said logical partition to audit said amount of usage of said

applications in said logical partition or a charge based on said amount of usage of said

applications; and

said billing function determining a bill for each of said applications based on the

information obtained from said one system function and the logical partition hardware

resources usage information.

13.   A method as set forth in claim 12 wherein said guest operating system determines

the amount of usage of each of said applications and reports the amount of usage of each of

said applications to said shared storage.

14.   A method as set forth in claim 12 wherein said guest operating system calculates

the amount of usage of each of said applications using storage private to said logical

partition, and then reports the amount of usage to said shared storage.

15.   A method as set forth in claim 12 wherein said one system function processes said

information obtained from said shared storage into a different form, and then reports said

information in said different form to said billing function.

16.   A method as set forth in claim 12 further:

        determining an amount of usage of said logical partition without using application

usage information generated by said guest operating system;

        ~~determining a total usage of all of said applications in said logical partition based on~~

~~said information from said shared storage; and~~

        ~~comparing said total usage of all of said applications to said amount of usage of said~~

~~logical partition, to audit said amount of usage of said applications in said logical partition~~

~~or a charge based on said amount of usage of said applications.~~

17.   A method as set forth in claim 16 wherein the step of determining said amount of

usage of said logical partition based on said system data is performed by checking usage

bits of processors which execute said logical partition.

18.   A method as set forth in claim 12 wherein said bill is based on a peak usage.

19.   Cancelled

20.   A method as set forth in claim ~~19~~ 12 wherein said determining said amount of usage

of said logical partition is performed by checking usage bits of processors which execute

said logical partition.

21.   Cancelled

22.   A method as set forth in claim ~~19~~ 12 , wherein another of said system functions

determining said amount of usage of said logical partition without using application

usage information generated by said guest operating system comprises:

        computing percent utilization of said logical partition as said logical partition

utilization = (actual logical partition usage) X (number of dedicated processors for logical

partition or specified processor share for said logical partition X total number of

processors).

23.   A method as set forth in claim ~~19~~ 12 , wherein said comparing said total usage of

all of said applications in said logical partition to said amount of usage of said logical

partition to audit said amount of usage of said applications in said logical partition,

comprises:

      reading auditing and business rules;

      adding a usage of said applications for said logical partition;

      computing percent utilization of said logical partition to form said usage of said

logical partition;

      reading logical partition usage data for said logical partition;

      subtracting said logical partition usage data from said usage of said logical partition

to form a difference;

      determining whether said difference is within an acceptable range; and

      if the difference is within said acceptable range, computing a bill.

Conclusion

4.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to CAROLINE ARCOS whose telephone number is

(571)270-3151. The examiner can normally be reached on Monday-Thursday 7:00 AM

to 5:30 PM.

5.   If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Meng-Ai An can be reached on 571-272-3756. The fax phone number for the

organization where this application or proceeding is assigned is 571-273-8300.

6.   Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR. Status

information for unpublished applications is available through Private PAIR only. For

more information about the PAIR system, see http://pair-direct.uspto.gov. Should you

have questions on access to the Private PAIR system, contact the Electronic Business

Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO

Customer Service Representative or access to the automated information system, call

800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Caroline Arcos/
Examiner, Art Unit 2195

/Meng-Ai An/
Supervisory Patent Examiner, Art Unit 2195